

CLAIMS

What is claimed is:

1. A system that asymmetrically stimulates at least the parvocellular and the magnocellular pathways of the binocular visual processing of at least one set of displayed images comprising:

a means for controlling of ambient lighting conditions in order to induce mesopic vision for both eyes;

a means for storing and/or displaying at least one set of images that are either stationary or transient;

a means for blocking peripheral vision of the space outside of the said means of displaying images;

an arrangement of optics that asymmetrically stimulates at least the parvocellular and magnocellular pathways of the binocular visual processing of the at least one set of images.

2. A means as claimed in claim 1 wherein the step of controlling of ambient lighting comprises:

coarse adjustment of a room's general illumination;

fine adjustment of the light intensities reaching each eye with independent control of broad spectrum optical attenuation filters.

3. A means as claimed in claim 1 wherein the step of displaying at least one set of images is created for each eye either chemically, electronically or optically such that at least two sets of displayed images are viewed simultaneously.

4. A means as claimed in claim 1 wherein the step of creating at least one set of images for each eye comprises means for creating two sets of images, one set for each eye, which are simultaneously displayed for each eye.

5. A means as claimed in claim 1 wherein the step of blocking peripheral vision of the space outside of the said means of displaying images comprises:

spatial filters;
refractive and/or reflective and/or dispersive optics for lateral and/or angular magnification of an image.

6. A means as claimed in claim 1 wherein the step consisting of an arrangement of optics that asymmetrically stimulates at least the parvocellular and magnocellular pathways of the binocular visual processing of the at least one set of images is independently controlled with respect to each eye's view and comprises at least one of spatial and/or optical filters that are selected from the group consisting of solid, liquid or gaseous filter material.

7. A means as claimed in claim 1 wherein the step consisting of an arrangement of optics that asymmetrically stimulates at least the parvocellular and magnocellular pathways of the binocular visual processing of the at least one set of images further comprises simultaneously viewing at least two sets of images at least one set by each eye and that the at least two sets are made distinguishable in terms of size, shape, color, hue, luminosity contrast, resolution, and/or brightness.

8. A system of optics that allows independent control of at least two sets of displayed images in terms of size, shape, color, hue, luminosity contrast, resolution, and/or brightness comprising:

at least one light emitting display capable of displaying full color streaming video;
at least one substrate supporting reflections.

9. A system of optics of claim 8, wherein the display is selected from the group consisting of either the luminescent or incandescent types.

10. A system of optics of claim 8, wherein the substrate is optically homogeneous and/or supports films of differing refractive indices, material compositions and thicknesses.

11. A system of optics of claim 8, wherein the at least one substrate supporting reflections is pliable enough to distort the size and shape of the reflections and includes a plastic sheet as a means to control the size and shape of the reflections.

12. A system of optics of claim 8, wherein the at least one substrate supporting reflections is colored and is a means to affect the perception of color and hue within the images reflected on the at least one substrate.

13. A system of optics of claim 8, wherein the at least one substrate supporting reflections is optically clear to allow the viewing of additional media of color in addition to the reflection of the displayed images as a means to affect the perception of color and hue within the images reflected on the at least one substrate.

14. A system of optics of claim 8, wherein the at least one substrate supporting reflections is optically clear to allow the viewing of additional media in addition to the reflection of the displayed images in order to affect the perception of luminosity contrasts and resolution within the images reflected on the at least one substrate.

15. A system of optics of claim 14, wherein the means to affect luminosity contrasts within the images reflected on the at least one substrate further comprises:

an increase of luminosity contrasts within the images reflected on the at least one substrate based on blackbody absorption of the light transmitted through the at least one substrate by the additional media viewed through the reflected images;

a decrease of luminosity contrasts and a decrease of resolution within the images reflected on the at least one substrate based on scattering of the light transmitted through the at least one substrate by the additional media viewed through the reflected images.

16. A system of optics of claim 8, wherein the means for supporting reflections further comprises more than one substrate, not restricted in sizes, shapes, material compositions and that are separated by air.

17. A system of optics of claim 16, wherein the plurality of substrates supporting reflections further serves as a means for decreasing resolution and increasing brightness.